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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/007,839	11/08/2001	Theodore W. Houston	TI-23546	7628

23494 7590 05/22/2002

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EXAMINER
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SCHILLINGER, LAURA M

ART UNIT	PAPER NUMBER
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2813

# 3

DATE MAILED: 05/22/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

ARC

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/007,839	HOUSTON ET AL.	
	Examiner	Art Unit	
	Laura M Schillinger	2813	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 November 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All   b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

Art Unit: 2813

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Blewer et al ('200).

In reference to claim 1, Blewer teaches a method comprising:

a) forming a structure (Fig.4 (5)) having porous semiconductor material at a first surface thereof (Fig.4 (4));

b) introducing an oxidizing species into the porous semiconductor material; and either before or after step b),

c) forming an epitaxial semiconductor layer on the porous material (Col.2, lines: 5-10), and reacting the oxidizing species with the porous semiconductor material to form a buried dielectric layer beneath the epitaxial layer (Col.2, lines: 10-20).

In reference to claim 2, Blewer teaches wherein the oxidizing species consists of O (col.2, lines: 10-20).

Art Unit: 2813

In reference to claim 3, Blewer teaches wherein the semiconductor layer consists of Si (Col.2, lines: 10-15).

In reference to claim 4, Blewer teaches a method comprising:

- a) anodizing a Si wafer to form porous Si (Col.3, lines: 50-55 and Col.2, lines: 30-45);
- b) introducing O into the porous Si and either before or after step b) (Col.2, lines: 10-20);
- c) forming a semiconductor layer on the porous Si and reacting the O with the porous semiconductor material to form a BOX (Col.2, lines: 1-20).

In reference to claim 5, Blewer teaches wherein the semiconductor layer consists of Si (Col.2, lines: 10-15).

In reference to claim 6, Blewer teaches a method comprising:

- a) partially anodizing a Si wafer to form porous Si (Col.3, lines: 30-40);
- b) forming an epi layer on the porous Si (Col.2, lines: 5-20)
- b) introducing O into the porous Si reacting the O with the porous semiconductor material to form a BOX (Col.2, lines: 5-20).

In reference to claim 7, Blewer teaches wherein the oxidizing species consists of O (Col.2, lines: 10-20).

Art Unit: 2813

In reference to claim 8, Blewer teaches wherein the semiconductor layer consists of Si(Col.2, lines: 10-15).

In reference to claim 9, Blewer teaches the device as a result of claim 1 (linking claim-automatically rejected with claim 1).

In reference to claim 10, Blewer teaches the device as a result of claim 4 (linking claim-automatically rejected with claim 4).

In reference to claim 11, Blewer teaches the device as a result of claim 6 (linking claim-automatically rejected with claim 6).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura M Schillinger whose telephone number is (703) 308-6425. The examiner can normally be reached on M-F 7:00 -4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Olik Chaudhuri can be reached on (703) 306-2794. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1500.


Application/Control Number: 10/007,839

Page 5

Art Unit: 2813

LMS

May 13, 2002

  
OLIK CHAUDHURI  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800